The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Environment and Natural Resources

BILL:	SB 1538
INTRODUCER:	Senator Stewart
SUBJECT:	Implementation of the Recommendations of the Blue-Green Algae Task Force
DATE:	April 3, 2023
REVISED:	

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Carroll	Rogers	EN	**Pre-meeting**
2.			AEG	
3.			FP	

I. Summary:

SB 1538 requires periodic inspection of onsite sewage treatment and disposal systems (OSTDS) that are not required to have an operating permit. The bill directs the Department of Environmental Protection (DEP) to administer an OSTDS inspection program and to adopt rules that include the following:

- A schedule for a five-year inspection cycle;
- A county-by-county implementation plan phased in over a ten-year period, with priority given to those areas within a priority focus area for springs;
- Minimum standards for a functioning system;
- Requirements for the pumpout or repair of a failing system; and
- Enforcement procedures for an owner's failure to obtain an inspection of the system or a contractor's failure to timely report inspection results to DEP and the system owner.

The bill also requires basin management action plans (BMAPs) to include a prioritized list of spatially focused suites of projects in areas likely to yield maximum pollutant reductions. Each project with a total cost exceeding $1 million must be monitored to determine if it is working to reduce nutrient pollution or water use, or both, as intended. The bill requires the monitoring assessments to be completed expeditiously and included in each BMAP update.

II. Present Situation:

Blue-Green Algae Task Force

In 2019, Governor DeSantis directed the Department of Environmental Protection (DEP) to establish a Blue-Green Algae Task Force to expedite reduction of nutrient pollution and

cyanobacteria blooms in the state.[1] The task force provides guidance and specific, science-based recommendations to expedite the restoration of water bodies that have been adversely affected by cyanobacteria blooms.[2] The task force has focused on source identification, nutrient reduction and remediation efforts, algal toxins and human health effects, and innovative technologies for the prevention, cleanup, and mitigation of harmful algal blooms.[3]

Water Quality and Nutrients

Phosphorus and nitrogen are naturally present in water and are essential nutrients for the healthy growth of plant and animal life.[4] The correct balance of both nutrients is necessary for a healthy ecosystem; however, excessive nitrogen and phosphorus can cause significant water quality problems.[5]

Phosphorus and nitrogen are derived from natural and human-made sources.[6] Human-made sources include sewage disposal systems (wastewater treatment facilities and septic systems), overflows of storm and sanitary sewers (untreated sewage), agricultural production and irrigation practices, and stormwater runoff.[7]

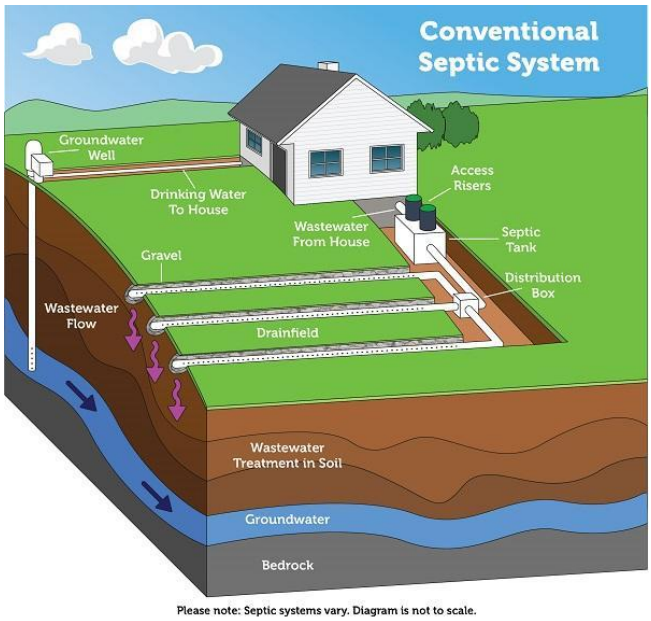
Excessive nutrient loads may result in harmful algal blooms, nuisance aquatic weeds, and the alteration of the natural community of plants and animals.[8] Dense, harmful algal blooms can also cause human health problems, fish kills, problems for water treatment plants, and impairment of the aesthetics and taste of waters. Growth of nuisance aquatic weeds tends to increase in nutrient-enriched waters, which can impact recreational activities.[9]

Onsite Sewage Treatment and Disposal Systems

Onsite sewage treatment and disposal systems (OSTDSs), commonly referred to as "septic systems," generally consist of two basic parts: the septic tank and the drainfield.[10] Waste from toilets, sinks, washing machines, and showers flows through a pipe into the septic tank, where anaerobic bacteria break the solids into a liquid form. The liquid portion of the wastewater flows into the drainfield, which is generally a series of perforated pipes or panels surrounded by lightweight materials such as gravel or Styrofoam. The drainfield provides a secondary treatment

[1] State of Florida, Office of the Governor, *Executive Order Number 19-12 (2019)*, available at https://www.flgov.com/wp-content/uploads/orders/2019/EO_19-12.pdf; DEP, *Blue-Green Algae Task Force*, https://protectingfloridatogether.gov/state-action/blue-green-algae-task-force (last visited Mar. 13, 2023).
[2] DEP, *Blue-Green Algae Task Force Consensus Document #1* (Dec. 2, 2019), *available at* https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.
[3] *Id.*
[4] U.S. Environmental Protection Agency, *The Issue*, https://www.epa.gov/nutrientpollution/issue (last visited Feb. 10, 2023).
[5] *Id.*
[6] *Id.*
[7] U.S. Environmental Protection Agency (EPA), *Sources and Solutions*, https://www.epa.gov/nutrientpollution/sources-and-solutions (last visited Feb 10, 2023).
[8] EPA, *The Issue*, https://www.epa.gov/nutrientpollution/issue (last visited Feb. 10, 2023).
[9] *Id.*
[10] Florida Department of Health (DOH), *Septic System Information and Care*, http://columbia.floridahealth.gov/programs-and-services/environmental-health/onsite-sewage-disposal/septic-information-and-care.html (last visited Feb 10, 2023); EPA, *Types of Septic Systems*, https://www.epa.gov/septic/types-septic-systems (last visited Feb. 10, 2023) (showing the graphic provided in the analysis).

where aerobic bacteria continue deactivating the germs. The drainfield also provides filtration of the wastewater, as gravity draws the water down through the soil layers.[11]



There are an estimated 2.6 million OSTDSs in Florida, providing wastewater disposal for 30 percent of the state's population.[12] In Florida, development in some areas is dependent on OSTDSs due to the cost and time it takes to install central sewer systems.[13] For example, in rural areas and low-density developments, central sewer systems are not cost-effective. A Florida Department of Health report in 2008 revealed that less than one percent of OSTDSs in Florida were actively managed under operating permits and maintenance agreements.[14] The remainder of the systems were generally serviced only when they failed, often leading to costly repairs that could have been avoided with routine maintenance.[15]

In a conventional OSTDS, the septic tank does not reduce nitrogen from raw sewage. Approximately 30-40 percent of the nitrogen levels are reduced in the drainfield of a system that is installed 24 inches or more from groundwater.[16] This still leaves a significant amount of nitrogen to percolate into the groundwater, which makes nitrogen from OSTDSs a potential contaminant in groundwater.[17]

Different types of advanced OSTDSs exist that can remove greater amounts of nitrogen than a typical septic system (often referred to as "advanced" or "nutrient-reducing" septic systems).[18]

---

[11] *Id.*
[12] DEP, *Onsite Sewage Program*, https://floridadep.gov/water/onsite-sewage#:~:text=Onsite%20sewage%20treatment%20and%20disposal%20systems%20%28OSTDS%29%2C%20commonly,represents%2012%25%20of%20the%20United%20States%E2%80%99%20septic%20systems (last visited Feb. 10, 2023).
[13] DOH, *Report on Range of Costs to Implement a Mandatory Statewide 5-Year Septic Tank Inspection Program*, Executive Summary (Oct. 1, 2008), *available at* http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/costs-implement-mandatory-statewide-inspection.pdf (last visited Feb. 10, 2023).
[14] *Id.*
[15] *Id.*
[16] DOH, *Florida Onsite Sewage Nitrogen Reduction Strategies Study, Final Report 2008-2015*, 21 (Dec. 2015), *available at* http://www.floridahealth.gov/environmental-health/onsite-sewage/research/draftlegreportsm.pdf; *see* Fla. Admin. Code R. 64E-6.006(2).
[17] University of Florida Institute of Food and Agricultural Sciences (IFAS), *Onsite Sewage Treatment and Disposal Systems: Nitrogen*, 3 (Oct. 2020), *available at* http://edis.ifas.ufl.edu/pdffiles/SS/SS55000.pdf (last visited Feb. 10, 2023).
[18] DOH, *Nitrogen-Reducing Systems for Areas Affected by the Florida Springs and Aquifer Protection Act* (updated May 2021), *available at* http://www.floridahealth.gov/environmental-health/onsite-sewage/products/_documents/bmap-n-reducing-tech-18-10-29.pdf.

DEP publishes on its website approved products and resources on advanced systems.[19] Determining which advanced system is the best option can depend on site-specific conditions. The owner of a properly functioning OSTDS must connect to a sewer system within one year of receiving notification that a sewer system is available for connection.[20] Owners of an OSTDS in need of repair or modification must connect within 90 days of notification from DEP.[21]

In 2019, the Blue-Green Algae Task Force recommended that:

- DEP should develop a more comprehensive regulatory program to ensure that OSTDSs are sized, designed, constructed, installed, operated, and maintained to prevent nutrient pollution, reduce environmental impact, and preserve human health;
- More post-permitting septic tank inspections should take place;
- Protections for vulnerable areas in the state should be expanded; and
- Additional funding is needed to accelerate septic to sewer conversions.[22]

In 2020, the Clean Waterways Act provided for the transfer of the Onsite Sewage Program from the Department of Health (DOH) to DEP.[23] The Onsite Sewage Program will be transferred over a period of five years and guidelines for the transfer are provided by an interagency agreement.[24] Per the agreement, DEP has the primary powers and duties of the Onsite Sewage Program, meaning that the county departments of health will implement the OSTDS program under the direction of DEP instead of DOH.[25] The county departments of health still handle permitting and inspection of OSTDSs.[26] In the event of an alleged violation of OSTDS laws, county departments of health will be responsible for conducting an inspection to gather information regarding the allegations.[27]

Basin Management Action Plans

DEP is the lead agency in coordinating the development and implementation of total maximum daily loads (TMDLs).[28] Basin management action plans (BMAPs) are one of the primary

[19] DEP, *Onsite Sewage Program, Product Listings and Approval Requirements*, https://floridadep.gov/water/onsite-sewage/content/product-listings-and-approval-requirements (last visited Feb. 10, 2023).
[20] Section 381.00655, F.S.
[21] *Id*.
[22] DEP, *Blue-Green Algae Task Force Consensus Document #1*, 6-7 (Oct. 11, 2019), *available at* https://floridadep.gov/sites/default/files/Final%20Consensus%20%231_0.pdf.
[23] DEP, *Program Transfer*, https://floridadep.gov/water/onsite-sewage/content/program-transfer (last visited Feb. 10, 2023).
[24] DOH, DEP, *Interagency Agreement between DEP and DOH in Compliance with Florida's Clean Waterways Act for Transfer of the Onsite Sewage Program*, 5 (June 30, 2021), *available at* http://www.floridahealth.gov/environmental-health/onsite-sewage/_documents/interagency-agreement-between-fdoh-fdep-onsite-signed-06302021.pdf (last visited Feb. 10, 2023).
[25] *Id.* at 14.
[26] *Id.* at 11; and DEP, *Onsite Sewage Program*, https://floridadep.gov/water/onsite-sewage (last visited Feb. 10, 2023).
[27] DOH, DEP, *Interagency Agreement between DEP and DOH in Compliance with Florida's Clean Waterways Act for Transfer of the Onsite Sewage Program* at 11.
[28] Section 403.061, F.S. DEP has the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it. Furthermore, s. 403.061(21), F.S., allows DEP to advise, consult, cooperate, and enter into agreements with other state agencies, the federal government, other states, interstate agencies, etc.

mechanisms DEP uses to achieve TMDLs.[29] BMAPs are plans that address the entire pollution load, including point and nonpoint discharges,[30] for a watershed. BMAPs generally include:

- Permitting and other existing regulatory programs, including water quality based effluent limitations;
- Best management practices and non-regulatory and incentive-based programs, including cost-sharing, waste minimization, pollution prevention, agreements, and public education;
- Public works projects, including capital facilities; and
- Land acquisition.[31]

DEP may establish a BMAP as part of the development and implementation of a TMDL for a specific waterbody. First, the BMAP equitably allocates pollutant reductions to individual basins, to all basins as a whole, or to each identified point source or category of nonpoint sources.[32] Then, the BMAP establishes the schedule for implementing projects and activities to meet the pollution reduction allocations.[33] The BMAP development process provides an opportunity for local stakeholders, local government, community leaders, and the public to collectively determine and share water quality cleanup responsibilities collectively.[34] BMAPs are adopted by secretarial order.[35]

BMAPs must include milestones for implementation and water quality improvement. They must also include an associated water quality monitoring component sufficient to evaluate whether reasonable progress in pollutant load reductions is being achieved over time. An assessment of progress toward these milestones must be conducted every five years and revisions to the BMAP must be made as appropriate.[36]

DEP delineates priority focus areas, in coordination with the water management districts, for Outstanding Florida Springs in BMAPs.[37] A priority focus area is the area or areas of a basin where the Floridan Aquifer is generally most vulnerable to pollutant inputs and where there is a known connectivity between groundwater pathways and an Outstanding Florida Spring.[38] In delineating priority focus areas, DEP must consider groundwater travel time to the spring, hydrogeology, nutrient load, and any other factors that may lead to degradation of an Outstanding Florida Spring.[39]

---

[29] A TMDL is a scientific determination of the maximum amount of a given pollutant that can be absorbed by a waterbody and still meet water quality standards. DEP, *Total Maximum Daily Loads Program*, https://floridadep.gov/TMDL (last visited Mar. 24, 2023).
[30] Fla. Admin. Code R. 62-620.200(37). "Point source" is defined as "any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged." Nonpoint sources of pollution are sources of pollution that are not point sources.
[31] Section 403.067(7), F.S.
[32] *Id.*
[33] *Id.*
[34] DEP, *Basin Management Action Plans (BMAPs)*, https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps (last visited Mar. 13, 2023).
[35] Section 403.067(7), F.S.
[36] *Id.*
[37] Section 373.803, F.S. Outstanding Florida Springs include all historic first magnitude springs and associated spring runs, as well as De Leon, Peacock, Poe, Rock, Wekiwa, and Gemini springs and their associated spring runs. Section 373.802, F.S.
[38] Section 373.802, F.S. Outstanding Florida Springs
[39] Section 373.803, F.S.

In 2019, the Blue-Green Algae Task Force made the following recommendations for BMAPs:
- Include regional storage and treatment infrastructure in South Florida watersheds;
- Consider land use changes, legacy nutrients, and the impact of the BMAP on downstream waterbodies;
- Develop a more targeted approach to project selection; and
- Evaluate project effectiveness through monitoring.[40]

III. Effect of Proposed Changes:

The bill contains whereas clauses that acknowledge the following:
- Governor DeSantis created the Blue-Green Algae Task Force to improve water quality for the benefit of all Floridians;
- The task force's consensus report was issued in October 2019, with multiple recommendations for basin management action plans (BMAPs), agriculture, human waste, stormwater, technology, public health, and science;
- In June 2020, Governor DeSantis signed SB 712, the Clean Waterways Act, which implemented many of the recommendations of the task force; and
- The full implementation of the task force's recommendations will require enactment of additional substantive legislation.

Section 1 amends s. 381.0065, F.S., to require periodic inspections for onsite sewage treatment and disposal systems (OSTDSs), excluding systems required to have an operating permit, at least once every five years, to assess the fundamental operational condition of the system, prolong the life of the system, and identify any failure within the system. The bill provides that this requirement will be effective July 1, 2025.

The bill requires the Department of Environmental Protection (DEP) to administer an OSTDS inspection program, to implement program standards, procedures, and requirements, and to adopt rules that must include, at a minimum, all of the following:
- A schedule for a five-year inspection cycle;
- A county-by-county implementation plan phased in over a ten-year period, with first priority given to those areas within a priority focus area for springs identified by DEP;
- Minimum standards for a functioning system;
- Requirements for the pumpout or repair of a failing system; and
- Enforcement procedures for failure of a system owner to obtain an inspection and failure of a contractor to timely report inspection results to DEP and the system owner.

Section 2 amends s. 403.067, F.S., which governs establishment and implementation of total maximum daily loads. The bill requires that a new or revised BMAP must include a list that identifies and prioritizes spatially focused suites of projects in areas likely to yield maximum pollutant reductions.

The bill requires that for each project listed with a total cost exceeding $1 million, DEP must assess through integrated and comprehensive monitoring whether the project is working to

[40] DEP, *Blue-Green Algae Task Force Consensus Document #1* at 2-4.

reduce nutrient pollution or water use, or both, as intended. The bill provides that the assessments must be completed expeditiously and included in each BMAP update.

The bill makes technical changes.

Section 3 provides an effective date of July 1, 2023.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The Department of Environmental Protection may incur additional costs in administering the onsite sewage treatment and disposal system inspection program.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends sections 381.0065 and 403.067 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.